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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

DIRK HEINRICH, ET AL.

: EXAMINER: LE, H. T.

SERIAL NO: 10/624,528

:

FILED: JULY 23, 2003

: GROUP ART UNIT: 1773

FOR: POLYAMIDE FLUIDIZED-BED-
COATING POWDER FOR THIN-LAYER
FLUIDIZED-BED COATING

:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s). No more than five (5) pages are provided.

I am the attorney or agent of record.

Respectfully Submitted,

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ATTACHMENT TO PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants respectfully request review of the following two issues.

1) Anticipation. Claims 1-5, 8 and 9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Mumcu (U.S. 4,687,837). This rejection is traversed.

The present invention as set forth in **Claim 1** relates to a polyamide powder, comprising polyamide particles having

a median grain size d 50 of from 20 to 90 μm ,

a content of fines < 5 μm of below 1% by weight, and

at least 75% by weight of spherical particles in which all three spatial axes x, y and z of the individual particles have the same dimension to within $\pm 10\%$.

In contrast, Mumcu (U.S. 4,687,837), Suzuki and Araki et al (US 6,777,488) fail to disclose or suggest a polyamide powder as claimed with polyamide particles having a d50 of from 20 to 90 μm , a content of fines < 5 μm of below 1% by weight, and at least 75% by weight of spherical particles in which all three spatial axes x, y and z of the individual particles have the same dimension to within $\pm 10\%$.

Mumcu (U.S. 4,687,837) does not disclose or suggest that at least 75% by weight of spherical particles in which all three spatial axes x, y and z of the individual particles have the same dimension to within $\pm 10\%$. All that Mumcu discloses at col. 3, first line is that there are particles that assume spherical shapes. However, just because there is a spherical shape, does not mean that the particles have a dimension within a narrow range of distribution as claimed ($\pm 10\%$). Thus, Mumcu does not anticipate the present invention.

In addition, superior results are demonstrated in Table 1 at page 10 of the specification which render the present invention unobvious.

The powder of the invention from example 1 were used for coating metal pipes. For comparison, a number of commercially available polyamide powders (Degussa AG) were

used. These are VESTOSINT 1111 black, VESTOSINT 1174 white, and VESTOSINT 2157 black. The results are given in Table 1 below which is copied from page 10 of the specification.

Table 1

Coating trials

Product	d 50 [μm]	< 5% [%]	Proportion of spherical particles [%]	Pipe layer thickness achieved [μm]	Max. radial layer thickness difference [μm]	Dusting [sec]	Fluidization [grade]
Polyamide powder A	52	0.1	84	120	<5	<5	1-2
VESTOSINT 2157	57	0.5	~70	120	10	10	3
VESTOSINT 1111	100	0.1	~65	200	<5	<5	1
VESTOSINT 1174	40	8	~70	130	20	>15	5

The data in the Table are discussed in the specification at pages 10 and 11 as follows:

The polyamide powder of the invention gave a very homogeneous coating on the metal pipe, the quality of the coating reaching that of a traditional fluidized-bed-coating powder. In terms of dusting and fluidization, the powder exhibits comparably good processing properties. The polyamide powder of the invention can achieve desired layer thicknesses below 200μm. Satisfactory layer thicknesses of 120μm could be achieved in the trial reproducibly, without defects.

In contrast, the only layer thicknesses which could be achieved in comparable quality using commercially available fluidized-bed-coating powders were 200μm and above.

Conventional, commercially available minicoating powders and conventional, commercially available fine powders exhibit markedly poorer fluidization properties in comparison, and more dusting at the fluidizing pan.

Although coherent layers of from 120 to 130 μm could be achieved on the test system, these exhibit markedly greater coating inhomogeneity, attributed mainly to the poorer fluidizing behavior.

The above superior properties are not disclosed or suggested by Mumcu. Thus, the claims are not obvious over Mumcu.

In view of the above, this rejection should be withdrawn.

2) Obviousness. Claims 6 and 7 stand rejected under 35 U.S.C. § 103(a) over Mumcu in view of Suzuki or Araki et al. This rejection is traversed.

All that Suzuki discloses in Example 2 (referred to by the Examiner) is a 200-mesh pass powder. No other specifications of the powder are given.

Araki et al also fails to cure the defects of Mumcu.

Further the claimed powder of the present invention exhibits superior properties which are not disclosed or suggested by Suzuki or Araki et al.

Each of Suzuki or Araki et al do not cure the defects of Mumcu.

In view of the above, this rejection should be withdrawn.

Withdrawal of all rejections of record is respectfully requested.